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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/802,990	03/16/2004	Donald L. Clason	3270	3925

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EXAMINER

GOLOBOY, JAMES C

ART UNIT	PAPER NUMBER
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1714

DATE MAILED: 10/26/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/802,990

Applicant(s)

CLASON, DONALD L.

Examiner

James Goloboy

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 March 2004.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-20 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 3/16/2004 & 9/23/2005.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Use Claims

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 20 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claim 20 provides for the use of the composition of Claim 1, but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

Claim 20 is rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153

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USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd. v. Brenner*, 255 F.

Supp. 131, 149 USPQ 475 (D.D.C. 1966).

In order to overcome this rejection, it is advised that the applicant change "use of" language in Claim 20 to "process of using".

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-9, 11-12, 17, and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by LeSuer (U.S. Pat. No. 3,708,522).

LeSuer, in lines 1-5 of the abstract, discloses carboxylic acid esters useful as dispersants in lubricant compositions. In column 1 lines 47-61, LeSuer discloses that the esters are formed by contacting an ester of a carboxylic acid and a polyhydric alcohol with an acylating reactant. Attention is drawn to column 11 lines 19-26 (Example 21), where an ester is prepared by the reaction of polyisobutenyl succinic anhydride (PIBSA) with pentaerythritol, which are respectively a polyalkenyl-substituted acylating agent and a polyol as recited in Claim 1(a). PIBSA is also a polyalkenyl-substituted dicarboxylic acid anhydride, as recited in Claim 4. From column 11 line 66 through column 12 line 26, LeSuer describes the post-treatment of the above ether with maleic anhydride to form the

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final dispersant product. As no nitrogen-containing reactants are used, the product is nitrogen-free, as recited in Claims 1(a) and 2. The PIBSA of Example 21 has an averaged molecular weight of 1,100, falling within the range recited in Claim 5, and the use of pentaerythritol as the polyol meets Claim 7. From column 5 line 56 through column 6 line 20 and column 6 lines 22-45, LeSuer discloses that many of the other polyols recited in Claims 6 and 7 are also suitable for use as in the preparation of the dispersant.

In column 13 lines 50-53, LeSuer discloses that the dispersant may be used as an additive in a composition including an oil of lubricating viscosity, as recited in Claim 1(c), and in column 14-16 gives examples of lubricating oils, including those that fall within the groups recited in Claim 11. In column 15 lines 1-12, LeSuer teaches that the dispersants may be used in combination with other conventional lubricant additives, including viscosity modifiers (viscosity index improving agents), as recited in Claims 1(d) and 3, antioxidants, and detergents, as recited in Claim 12. In column 13 lines 39-42 LeSuer discloses that the dispersant is usually present in amounts of from about 0.5 to about 10% by weight of the lubricating composition, falling within the range recited in Claim 16(a). In columns 15-16, LeSuer provides examples of lubricant compositions containing the nitrogen-free dispersant and further containing a primary metal hydrocarbyl dithiophosphate such as 0.07% by weight of zinc dioctyl phosphorodithioate (Composition D), meeting the requirements of Claims 1(b), 8, and 16(b), and forming the overall composition of Claim 1.

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The compositions taught by LeSuer therefore meet Claims 1-9, 11-12, and 20, and also meet Claim 17 as the compositions must be prepared by mixing the components.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

9. Claims 13 and 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over LeSuer (U.S. Pat. No. 3,708,522) in view of Papay (U.S. Pat. No. 5,652,201).

The discussion of LeSuer in paragraph 2 above is incorporated here by reference. LeSuer discloses an antioxidant and a metal deactivator (corrosion inhibitor) but not specific compounds suitable for use as those additives.

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From columns 40-52, Papay teaches common additives for lubricant compositions. In column 40 lines 32-33, Papay teaches that hindered phenols are used as antioxidants, and in column 40 lines 63-65 teaches diphenylamines as antioxidants, meeting Claim 15. In column 26 lines 60-64, Papay teaches that alkyl-substituted benzotriazoles, as recited in Claim 13, may be added as a metal deactivator. In the tables in column 50 lines 9-15 and 45-55, Papay shows typical concentrations for additives in a lubricant composition. Component a) in the first table is a detergent, and the corrosion inhibitor is a metal deactivator. All the concentrations taught by Papay either fall within or strongly overlap the concentrations recited in Claim 16.

It would have been obvious to one of ordinary skill in the art to use the additives taught by Papay in the lubricant composition of LeSuer, in order to prevent premature degradation of the composition, as taught in column 40 lines 29-32 of Papay, and to protect copper surfaces, as taught in column 26 lines 63-64 of Papay.

10. Claims 10 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over LeSuer in view of Emert (U.S. Pat. No. 5,498,809).

The discussion of LeSuer in paragraph 2 above is incorporated here by reference. LeSuer discloses a viscosity modifier and a detergent, but nor specific compounds suitable for use as those additives.

In column 67 lines 1-11, Emert teaches that olefin copolymers, as recited in Claim 10, may be used as viscosity modifiers in lubricant compositions. In

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column 67 lines 54-60 Emert further teaches that polyacrylates and polymethacrylates, also as recited in Claim 10, may be used as viscosity modifiers. In column 65 lines 63-66, Emert teaches that phenates, particularly sulfurised phenates may be used as viscosity index improvers, as recited in Claim 14.

It would have been obvious to one of ordinary skill in the art to use the additives taught by Emert in the lubricant composition of LeSuer, in order to improve the viscosity of the composition at extreme temperatures, as taught in column 66 lines 55-59 of Emert, and to prevent buildup of residues.

11. Claims 18-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over LeSuer in view of Stewart (U.S. Pat. No. 4,244,279).

The discussion of LeSuer in paragraph 2 above is incorporated here by reference. LeSuer discloses a lubricant with the composition of Claim 18, but does not teach its use in a vehicle hydraulic system.

Stewart discloses a lubrication system for a hydrostatic transmission. In column 6 lines 52-58, Stewart discloses that a lubricant is supplied to the transmission. The use of the lubricant of LeSuer in the lubrication system for a hydrostatic transmission of Stewart meets the limitations of Claims 18 and 19.

It would have been obvious to one of ordinary skill in the art to use the lubricant of LeSuer in the hydrostatic transmission of Stewart in order to reduce wear on the moving parts of the transmission.

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Nemoto (U.S. Pat. 6,419,041) describes a hydrostatic transmission with lubricant.

Clement (U.S. PG Pub. No. 2002/032127) and Robson (EP No. 1,213,341 A) disclose a lubricant composition with a nitrogen free dispersant and a metal hydrocarbyl dithiophosphate, but does not explicitly disclose a primary metal hydrocarbyl dithiophosphate.

Koch (U.S. Pat. No. 4,029,587), LeSuer (U.S. Pat. No. 3,381,022), and De Vries (U.S. Pat. 4,159,958) discloses a lubricant composition with a nitrogen free dispersant and a primary metal hydrocarbyl dithiophosphate, but are cumulative to the rejections set forth above.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James Goloboy whose telephone number is 571-272-2476. The examiner can normally be reached on M-F 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 571-272-1119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

James C. Golobay
JCG

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PRIMARY EXAMINER